Massachusetts Water Resources Commission

Meeting Minutes for April 8, 1999

Commission Members in Attendance:

Mark P. Smith	Designee, Executive Office of Environmental Affairs
Marilyn Contreas	Designee, Department of Housing and Community Development
Peter Webber	Commissioner, Department of Environmental Management
Richard Thibedeau	Designee, Department of Environmental Management
Glen Haas	Designee, Department of Environmental Protection
Russell Cohen	Designee, Department of Fisheries, Wildlife & Environmental Law Enforcement
Jeff Kapell	Public Member
David Rich	Public Member
Bob Zimmerman	Public Member

Others in Attendance:

Michele Drury	DEM
Vicki Gartland	DEM
Mike Gildesgame	DEM
Nina Danforth	DEM
Deborah Graham	DEM
Stephanie Lovejoy	DEM/OWR
Steve Lipman	DEP
Paul Blain	DEP/BRP
Joe Cerutti	DEP/BRP
Duane LeVangie	DEP
Nancy Ettele	MWRA
Lorriane M. Downey	MWRA/MDC
Susan Redlich	Waste Water Advisory Commission/MWRA
Michele Cobban Barden	NepRWA
Phillips Brady	MDMF
Sam Rice	Stone & Webster

***Agenda Item #1: Executive Director's Report*:**

- A bill has be submitted by Senator Tarr, and has been given top legislative priority, to establish a water resources conservation and efficiency program to assist municipalities to conduct certain water audits. A study by UMASS Water Resource Center will develop methods to determine the level of instream flow required to protect aquatic life in all Massachusetts rivers and streams. The Bill would fund a position in EOEA for a water conservation coordinator, to aid in providing technical assistance to communities. An additional study, prepared by UMASS, will report on the laws, regulations and policies dealing with water conservation, resource protection, drought preparedness and instream flow. Included within the Bill, are the designated funds and

technical assistance needed to conduct each study. A total sum of ten million dollars will be distributed over a period of five years. A hearing on the bill will be held on May 24th.

- Meetings of Interest The NEWW Association and the Ipswich River and Watershed Association organized a meeting in Worcester to discuss water conservation. The meeting was well attended, perhaps due a new program that gives workshop attendees contact credit for their attendance.

  On April 26 there will be a meeting on The Interbasin Transfer Performance Act Standards. The meeting will give members of the water and wastewater groups, and other commentators a forum to discuss revisions and give feedback.

  A meeting will be held next week by the work group to streamline the application process. MEPA is also revising their ENF Form, members of the work group will meet with MEPA to provide any information needed for the ENF Form revisions.
- Update on future interbasin transfer applicants Mansfield and Foxborough. A meeting will be held with both towns concerning the hydrology surrounding each of their proposed wells in the Ten Mile River Basin. The technical analyses of the area from each town do not coincide. The goal of the meeting is to have the towns agree on a general analysis prior to coming before the Commission.

Agenda Item #2 Vote: Meeting Minutes of October 1998

Contreas noted one typographical error that needed to be fixed.

A motion was proposed by Webber and seconded by Haas to

ADOPT THE MINUTES OF THE MEETING OF OCTOBER 8, 1998.

The motion passed by all members in attendance, except for David Rich who abstained due to his absence in October.

Agenda Item #3: Presentation: Staff Recommendation on the Braintree-Weymouth Interbasin transfer application by MWRA

Drury presented the staff recommendation. MWRA is requesting approval for an increase in interbasin transfer for a proposed relief facilities for the Braintree-Weymouth Interceptor (BWI). The net increase would be 17mgd, and the new facilities would alleviate overflow conditions and sewer backups. The final EIR has been certified for this project, and an ACO has been entered into by MWRA and DEP providing a specific work schedule for the BWI project. The towns of Braintree and Weymouth have entered into an ACO with DEP to address I/I and sewer problems in each town. The BWI project is targeted to relieve overflow during the one year six hour storm and eliminate raw sewerage flow to Smelt Brook during these storms. The new relief facilities will not alleviate overflow from storms of greater magnitude or overflow from areas outside of the project area.

The application was reviewed under existing interbasin transfer guidelines and also under the Draft Interbasin Transfer Act Performance Standards. Only six criteria apply to the BWI application, and the application meets all six criteria. There is a concern surrounding criteria seven and eight. Because of these concerns staff recommends six conditions for application approval.

The impact of removal of overflows on the salt wedge in Smelt Brook was a concern of the DFWELE'S Division of Marine Fisheries. However, after reviewing the application, DMF stated that removal of polluted water was desirable, but that the clean water entering the system through I/I was of concern to the fishery. Drury stated that, if action required in the ACO and the NPDES permit are implemented, the I/I removal will either have a positive or at least a neutral effect on the estuaries.

Gartland reported that the project was reviewed with respect to the instream flow of 0.15 cfsm year round except during March-May which is 2.4 cfsm, and Mid-September through Mid-October which is 1.0 cfsm, as outlined in the Weymouth-Weir River Basin plan. Review was done for the points where the overflow is being directly mitigated such as Smelt Brook. Although the project was determined to meet instream flow requirements at these points, staff is concerned about the amount of water which is not recharging the upper portions of the basin. However these concerns will be addresses by the DEP consent order.

Commissioner Webber stated inquired that if the Weymouth-Weir River basin is identified as stressed, that all storm water drainage and overflow should be examined. Smith responded that the MWRA's I/I task force will work with communities on this issue. The conditions ask for not just efforts to reduce overflow, but relate I/I work to recharge and stream flow. Also, basin teams should be aware of stressed basins with extensive sewering and as they work on basin projects they should incorporate opportunities of relating I/I to recharge and stream flow.

Commissioner Webber noted that some commentators have requested storm water policy be effective over the entire town, not just in areas that Conservation Commission has jurisdiction over. Smith suggested when the Commission has made an IBT decision, that the conclusion should be communicated to all relevant agencies. The MWRA's BWI project may be a good place to begin to develop a communication strategy for future Commission decisions.

Steve Lipman stated that the NPDES permit is for entire MWRA system. The ACO is strictly for the BWI project and it details activities the MWRA must perform. A key requirement of the ACO is the new understanding between the MWRA and the DEP. Part of the I/I task force is to present the DEP and the MWRA an outline for a new I/I program. This will be use in the newly developed MOU that will be completed by the end of July, 2000. Braintree and Weymouth have both entered into separate consent orders with DEP to address their significant issues with SSO and I/I. The other four communities will have to comply. DEP's enforcement measurements concerning these issues. The long-term goal is to eliminate major inflow into the system in the next twenty years. To be able to reduce overflow beyond the one-year-six-hour storm, inflow into the system needs to be reduced. These stated requirements, regulations and goals should address the concerns of the Commission.

There were several issues surrounding the six conditions of the approval. Haas was concerned, especially in condition two, that Zone B areas are not in the ACO and will be difficult execute enforcement. For condition five he requested the language be clarified. He cautioned that the present wording would suggest IBT reviews of all individual homes entering into the MWRA system; this could result in extra work for the Commission. Also, Haas requested clarification of the intent concerning the condition that requires the MWRA, under the IBT application for the Weymouth-Weir River Basin, to complete a water resource study for the entire MWRA water and

wastewater system. Past IBT have not required an entire system analysis this would be a precedent.

Smith responded that its intent is to be a precedent. The IBT regulations require a Water Resource Management Plan. Under the IBT Performance Standards, water resource plans are more extensive than in the past. The Commission would like to see the information on the water and wastewater systems be analyzed together.

Haas responded more information may be needed on impacts of local river basins, and the acquisition of that information could be expensive. He suggested that the MWRA spend its resources analyzing the impact on the Weymouth-Weir River Basin not the entire system.

The Commission suggested that areas in which sufficient information already exists, the MWRA can move forward with impact analysis faster than in areas where more information has to be acquired. Action could be taken now as opposed to later in certain impacted areas.

Smith further noted that the system wide analysis will be useful for the MWRA and the WRC as new MWRA projects approach. That when new IBT transfers come before the Commission from the MWRA, they can use this regional plan to satisfy the criteria for a local water resource management plan.

Agenda Item #4: Presentation on Bedrock Wells study by USGS

USGS and the DEP are proposing a study that would delineate contributing areas and source of water to supply wells that do not have a Zone II delineation. The funding for the study will be provided through Source Water Assessment Program (SWAP), established through the 1996 amendment to the Safe Drinking Water Act. Many of these wells are in complex hydrological settings, some of which are bedrock aquifers. Determining the contributing area in complex hydrological settings is difficult. Methods and techniques to delineate these areas will be developed as part of this study, these methods and techniques will be useful for other hydrological surveys.. The area would be evaluated based on past and newly collected information. Old data will be evaluated and complied and a collection plan will be developed to collect additional data. A conceptual model will be developed, the newly collected data and the old compiled data will be added to a computer data base and certain data entered into the GIS. Given the limited money, under the SWAP program, only one bedrock well will receive a comprehensive study. The study will include delineation of the area of contribution as well as a determination of water intercepted which would have recharged natural resources down gradient.

Smith inquired on the total number of sites in the study. Blain replied nine sites are on the list, all will not receive evaluations, but the first three are bedrock sites, one or two are in confined aquifers.

Kapell inquired to what extent the conclusions of the one bedrock well study, that includes recharge and source water analysis, could be generalized to other cases. Blain responded if the study could determine that pumping a lot of water out of storage over an extended period of time induced infiltration from surface water, it could make a good argument to conduct further studies on bedrock wells.

Gildesgame stated that generalizations would only be applicable in certain geological settings, that once you exit a specific geological setting a different analysis may have to be done. Blain responded that the setting may be different, but it could demonstrate the need to require additional information to install a bedrock well as a new source.

Smith inquired on the relation of inflow/outflow in a closed basin, it was suggested that bedrock wells have no impact on river basins. He questioned if this study could help determine if bedrock wells are separate or related to the river basin. Gartland responded it will help in determining if bedrock wells are related to river basin inflow/outflow.

Smith inquired if they received additional funds would they be able to do additional work on other bedrock sites. Blain responded they would be able to conduct other comprehensive studies.. Smith stated he would raise the issue at the next round table meeting at EOEA for the additional funding.

Zimmerman inquired on the basin location of the bedrock wells in the study.
Blain replied one well is in Sheffield and two wells are in Leicester . He further noted they have a limited amount of wells they can study under the SWAP funding, due to the number of wells that already having a Zone II.

Agenda # 5: Update: Stressed Basins

Gartland presented based on a memo given to the Commission on April 8, 1999. A small work group met to discuss how to use the stressed basin classification in state environmental programs. The following programs were suggested and discussed: Interbasin Transfer Act, New Source Approval, Water Management Act, and wastewater facilities. Other suggested possible programs that may be able to use the classification were MEPA, DEP sewer extension permits, and hydropower projects. It was decided that most programs would use the classification to require a higher level of review.

Smith noted the definition of stress will be broader than a water quantity issue. Many new screening tests could be added to existing reviews that would allow for a statewide ability to classify all basins in terms of stress. Haas inquired what incentives would be given to towns or industries to use a non stressed basin. He suggested dropping some regulations or reviews, if a non stressed basin was used.

Zimmerman suggested that as users come into a stressed basin they be required to design projects that will return to the system more water then they are taking out. He suggested they mitigate water lost in proportion to the level of stress in the basin. Haas suggested giving theses requirements in a numerical form, the phrase "a higher level of review' may be ambiguous to some towns or industries. Rich suggested not just looking at water quality and quantity, but looking at the impact on local water dependent ecosystems. Smith responded that the stress basin definition and analysis will not and should not be a substitute for individual site specific analysis. Rich further suggested investigating Vermont's new water quality criteria.

Smith requested that Gartland give reports on the progress the work group makes in defining a classification for stressed basins.

Agenda # 6: Update: Wetlands Restoration and Banking Program

Foote-Smith presented on the Wetland Restoration and Banking Program (WRBP), under the MWI, designed to clean up polluted waters, restore wetlands and protect remaining open spaces. The program has established a close state and federal partnership through the Coastal America Initiative (CAI). CAI applies to coastal and inland water wetlands, which gives the program tremendous amount of resources, applying directly to many wetland restoration projects.

Currently WRBP is developing monitoring protocols, and establishing a database of wetland restoration projects. The data base will provided information on current project while providing guidance for future projects. A primary report which was completed in the fall of 1997, identified possible restoration sites and wetland restoration goals. A goal of the program is to restore three thousand acres by the year 2010. More staff is required for the program to restore identified sites. The program, in past years, has been able to bring in more money than they have used from the state.

WRBP has prepared a Draft Neponset River Watershed Wetlands Restoration Plan, to serve as a template for other wetland restoration projects. Public comments received on the primary report requested the incorporation of water supply and the effects of drawdown on wetlands into the plan. The final report will be out in Spring of 1999. The Commission requested a copy of the final report be sent to the WRC members.

Webber inquired about a list, in order of project completion, the six other watersheds, excluding Neponset, that have funded restoration projects under way. Foote-Smith responded that the Upper Black Stone would probably be done first. Shawsheen, the Upper Ipswich, and Housatonic, are waiting for data from UMASS, which is causing delays in the programs forward movement. The Two Mill Hand River (?) project is the other project that is underway.

Smith suggested a study on the no net loss or net gain of wetland acres statewide. The information collected in the study may help determine whether the 3,000 acres is a reasonable goal and if it would be a pure net gain. A Compensatory Wetland Mitigation study funded by WRBP, was complete last year in conjunction with the Mitigation Banking Initiative. It concluded that 54.4% of project looked at in study were not in compliance with wetland regulations, these sites being wetland replicant sites. Foote-Smith suggested the Commission look at the report, and if they had any question she would gladly give another presentation.

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